FS2Crew: Flight Crew A32NX Project

Mini Tutorial for users new to the FS2Crew Concept using Button Control

Areas covered: From Pre-Flight Events (Cold and Dark) to Taxi

Goal: To show new users how the new MSFS FS2Crew's work and visually demonstrate how Flows and Checklists work

Requirements: FS2Crew for the FBW A32NX available at: www.fs2crew.com

Aircraft: FBW A32NX (Latest Development Version)

Starting Position: Any gate with the engines off (Cold and Dark)

This little tutorial is meant to walk new users through the 1st part of a typical flight. We'll cover starting from Cold and Dark and we'll stop at the taxi phase.

The goal of this tutorial is introduce new FS2Crew users to the concept of how the new FS2Crew interface panel works, and how "flows" and "checklists" are generally run in large aircraft.

If you are new to FS2Crew, you should be using **BUTTON CONTROL**. Save VOICE CONTROL for once you have the system figured out.

Let's begin!

Open the MSFS Tool bar and open the FS2CREW COMMAND CENTER.

The FS2Crew icon is the airplane nose in the toolbar.

The FS2Crew Main Panel will open.

We know it’s a big screen, but don’t worry, you can hide the parts you don’t need.

Once you know the system, you can basically fly with essentially no panels visible.

We're using BUTTON CONTROL today, so press the CFG button (Gear Box icon) in the top section of the Main Panel to open the CONFIG PANEL.

If you're not already in BUTTON CONTROL mode, select it now!

We recommend turning the opacity level down for the Main Panel. It just makes the main panel look more "discrete".

Ahh, that's better. That's a nice opacity level!

The INFO CENTER is taking up too much real estate, so let's remove it. Press the INFO button to toggle it off.

We'll be making some Cabin PAs, so press the PA button so the PREDICTIVE PA SYSTEM panel is visible. Note the Predictive PA system (CAPTAIN'S PAs section) is only available in Button Control, not Voice Control.

Press the FBW button in the left corner.

Look, the panel just got way smaller!

Now, press it again! And now it's back to normal size.

Okay, we're now sitting at the gate. The airplane is cold and dark.

Press the PRE-FLIGHT EVENTS (PFE) button in the top panel as shown above.

Like in the old FSX/P3D FS2Crew's, running the Pre-Flight Events is OPTIONAL!

Now press the ASSIST button. That will make the ASSIST panel visible. The ASSIST panel basically tells you what to do so you don't need to look at the manual while flying.

When you start the Pre-Flight events, several things will happen:

1. The FO will start their PRELIMINARY COCKPIT PREP flow. You can tell when a flow is running because the FLOWS button will turn blue. Also, the name of the flow will be listed in the gray action label.

2. See the number in the PRE-FLIGHT EVENTS button? That's the amount of time remaining to pushback.

You can press the PFE button repeatedly to make the time go down fast, but the time will not fast forward when the FO is running a flow.

3. The FO will connect the GPU and turn on the APU. If you do not want him to turn on the APU, there's a Config option to stop him from doing that. Maybe you want to start the APU later to save gas… your call!

Now it's time to do your setup flow as the Captain and the Pilot Flying. Start with the overhead and proceed in the order indicated by the arrows.

I'm not going to reproduce the Airbus manual, but make sure all the white lights are extinguished (for example, turn the FUEL PUMPS ON) and set the ADIRS to NAV. You should also run the fire and lights test to ensure no light bulbs are burnt out.

Continue your flow down the center panel.

Ensure everything is setup the way you want.

As the Pilot Flying, you also need the program the MCDU (aka, "The Box").

To summarize, based on OEM Airbus procedures, the Pilot Flying (that's you!) does almost all the cockpit setup. The FO / PM will basically just play with their phone the entire time 😉

If you don't know how to program the MCDU, please google it or search on YouTube. Most people use the DIFSRIP acronym when setting up the MCDU. If you've never heard of DIFSRIP before, google it!

You should also setup your EFIS panel in this flow order. The FO will setup his side during his flow.

When you're done everything, you would typically verbally cross check the displays with the FO to ensure that what you see on your screen matches up with what he or she sees on their screen.

If they don't match, then you have a problem!

But FS2Crew doesn't model the verbal instrument cross check. It's just not practical.

Same thing with the departure brief. A by the book Airbus brief is way too complex to model as it involves a lot of crosschecking and reading pages in the MCDU.

Wow, time flies! The gate agent has just come into the cockpit to hand you the loadsheet. You should hear the associated audio conversation.

Look at CHECKLIST ASSIST. It's now saying the BEFORE START CHECKLIST is available and may be run.

To run that that checklist, you need to trigger the action button: You can either use the assigned HOTKEY (which you can select on the Config Panel) or you can press the play icon "**>**" as indicated in the graphic above.

Unless you have AUTO RESPOND MODE enabled, you will need to press the action button <u>each time</u> you want to respond to the checklist challenge.

Run the checklist <u>down to the line only</u>. When the FO says, "**DOWN TO THE LINE**", <u>stop there</u>! I repeat, stop there! Do not continue the checklist below the line.

Looking at the time, we have 6 minutes left until pushback. Note the keyboard icon. When it is crossed out, it means the MSFS window is not in focus, and FS2Crew hotkeys are not available. To put the MSFS window in focus, click inside the aircraft.

As you can see in the DROP DOWN MENU, requesting PUSHBACK AND START clearance is the next item coming up. But do not do that now. Wait until we are ready for pushback!

Side bar: Take a look at the HIDE button. That button will hide the top panel. One of our goals in this version of FS2Crew was to really allow users to control the amount of “real-estate” the screen takes up.

Okay, the FA has told us they are ready to go in the back!

We have 52 seconds left until pushback (+52s is showing in the PFE button).

Now would be a good time to ask the FO to obtain PUSHBACK AND START CLEARANCE, so press the action button to make it happen!

If desired, you may make a Cabin PA telling the FA's that they can arm the slides by clicking the associated box.

After you've received pushback and start clearance, perform your BEFORE START FLOW.

It's a simple one: Turn the BEACON ON and ensure the PARKING BRAKE is ON.

When you've done your flow, complete the remainder of the BEFORE START CHECKLIST (the part **below** the line).

Press the action button to call BELOW THE LINE.

Then go through the checklist the same way you did before.

Okay, the checklist is complete, and we're ready for pushback!

We'll assume you're a discerning Flight Simmer so naturally you're using our official companion product, PUSHBACK EXPRESS. If you don't have it, it's available at: www.fs2crew.com 😉

Sidebar: You can open PBE via the FS2CREW COMMAND CENTER or you can just press the PBE Button on the Main Panel.

The panel shown below on the right is the PUSHBACK EXPRESS panel.

To keep things short, we're not going to go into details regarding the pushback. Just check the Pushback Express manuals if you're interested.

Let's assume we're now pushing back.

It's now time to start the engines.

In an Airbus, the Captain starts the engines, not the FO.

So please do this:

1. Announce STARTING ENGINE 2 via FS2Crew.
2. Start engine 2.
3. Repeat for engine 1.

After you've started both engines, start the Captain's AFTER START FLOW.

The first item in your flow is to set the ENGINE MODE SELECTOR to NORM.

This is important not to forget, because it's the trigger for the FO to start their AFTER START FLOW.

Then, as Captain, complete the rest of your flow. Your flow pattern looks like this:

So set the APU BLEED to OFF, set ANTI ICE as required, and set the APU MASTER to OFF.

The FO'S AFTER START flow looks like this:

You can see more details about the FO's AFER START FLOW in the INFO CENTER.

Remember when the FO is running a flow, it will be indicated here.

Okay, our AFTER START FLOWS are done. The nice thing about the Airbus is the flows are simple to memorize.

Now disconnect the pushback crew and run the AFTER START CHECKLIST. You remember how to run the checklist, right? Press the action button.

Once the AFTER START CHECKLIST is complete, ask the FO to request TAXI CLEARANCE.

Note that this conversation with ATC is pure ambience. Hopefully in the future we can hook it directly into the default ATC system.

Note: There's an option to disable these ATC calls on the CONFIG PANEL if you don't want them.

After the taxi clearance has been received, turn on the LIGHTS as shown below so you can "communicate" to the other airplanes and the tower that you are moving.

Note: There's a CONFIG OPTION to have the FO handle the lights if desired.

Now release the parking brake and start taxiing. Run the BRAKE TEST by tapping the brakes. That should auto trigger the "BRAKE CHECK – PRESSURE ZERO" Captain/FO audio callout (in Button Control only).

When ready, run the FLIGHT CONTROLS CHECK. Move the controls as shown in the FLOW ASSIST PANEL.

So move the elevator full up, then full down. You should hear the FO confirming the position ("*FULL UP*"… "*FULL DOWN*".

Do the same thing for the ailerons and rudder.

Note that you do not need to press the action button to call "RUDDER". In Button Control, it's automatic.

When complete, the FO will do his flight control checks (he only moves the side stick), but in FS2Crew he'll only move the side stick if the airplane is stationary otherwise the plane might start swerving around if your rudder is coupled to the ailerons.

When the FO's flight control check is complete, they will perform their TAXI FLOW:

- RADAR and PREDICTIVE WINDSHEAR SYSTEM ON
- ATC SET
- ND to ON.
- AUTOBRAKE to MAX

This completes our mini tutorial.

We hope that it helps new FS2Crew users understand more about how our system works, and about how flows and checklists operate in large, passenger aircraft.

As you can see, it's not like a little Cessna, where people generally do the checklists as "Read and Do". In something like an Airbus, it typically goes: Do the flow, then backup the critical items with the Checklist.

Comments, questions, concerns – please visit the FS2Crew Support Forum at Avsim.com

We hope you enjoyed the tutorial!